

Illicit Drug Use by Persons with Disabilities: Insights from the National Household Survey on Drug Abuse

Stephen French Gilson, PhD, Howard D. Chilcoat, ScD, and June M. Stapleton, PhD

ABSTRACT

Objectives. This study sought to evaluate the association of drug use with disability in a representative sample of the US household population.

Methods. The use of illicit drugs and alcohol reported by respondents in the 1991 National Household Survey on Drug Abuse who identified themselves as "disabled, unable to work" was compared with respondents without disabilities.

Results. Among younger adults (18–24 years), persons with disabilities were more likely than those without disabilities to report that they had used heroin (adjusted odds ratio [OR] = 6.89; 95% confidence interval [CI] = 1.35, 35.1) or crack cocaine (OR = 6.38; 95% CI = 1.05, 38.6). Among older adults (35 years and older), persons with disabilities were more likely to report the use of sedatives (OR = 2.46; 95% CI = 1.21, 4.94) or tranquilizers (OR = 2.18; 95% CI = 1.08, 4.42) not medically prescribed.

Conclusions. These results suggest that use of illicit drugs is a potentially serious problem among persons with disabilities and requires both research and clinical attention. (*Am J Public Health.* 1996;86:1613–1615)

Introduction

An estimated 27 million adult Americans (15%) have some form of disability that limits independent functioning.¹ Research regarding prevalence and unique risk factors associated with drug use by individuals with disabilities is sparse.^{2,3} The limited data available suggest a range of substance use patterns and potential problems among persons with different types of disabilities.^{4–6} A high prevalence of alcohol- or drug-related problems has been reported for spinal cord and head injury patients,^{7–9} and a history of traumatic brain injury is common among substance abuse patients.¹⁰ In spite of these data suggesting high rates of drug use and related problems among persons with disabilities, few treatment programs are available that are fully accessible and able to accommodate the diverse needs of such individuals.³

The few studies available provide little information about the magnitude of illicit drug use among persons with disabilities. This study, utilizing data from a nationwide survey, provides an initial evaluation of distribution of use among a segment of the disability community and gives some insight into the scope of the problem.

Method

Sample and Data Collected

Data were derived from the 1991 National Household Survey on Drug Abuse,¹¹ which uses a multistage probability sample to estimate drug use in the civilian, noninstitutionalized population of the United States. Data from the 24 590 adults (18 and older) interviewed in 1991 were included in the analysis.

Data collected included demographic information and self-reports of whether the respondent had ever used alcohol, cocaine, crack cocaine, heroin, marijuana, and sedatives or tranquilizers not medically prescribed. Respondents were classified as "with disability" if their response to "Present Work Situation" was "disabled, not able to work."

Statistical Analysis

To obtain estimates that were representative of the US population, each observation was weighted to account for the probability of selection at each sampling stage in the survey. The association between drug use and disability was determined with the LOGISTIC procedure in SUDAAN,¹² which accounts for sample weights and provides standard error estimates that take the complex sampling design into account. With the use of multiple logistic regression separately by age group, the odds of drug use for persons with disabilities were estimated relative to those without disabilities and adjustment was made for possible confounding variables of sex and race/ethnicity.

Stephen French Gilson is with the School of Social Work, Virginia Commonwealth University, Richmond, Va. Howard D. Chilcoat is with the Department of Psychiatry, Henry Ford Health Sciences Center, Detroit, Mich. June M. Stapleton is with the Neurology Service, Veterans Affairs Medical Center, Brooklyn, NY.

Requests for reprints should be sent to Stephen French Gilson, PhD, School of Social Work, Virginia Commonwealth University, 1001 W Franklin St, Richmond, VA 23284-2027.

This paper was accepted May 3, 1996.

TABLE 2—Lifetime Prevalence of Drug Use (Adjusted for Sex and Race/Ethnicity), by Disability Status: The 1991 National Household Survey on Drug Abuse

Drug	Ages 18–24 y, Rate of Use			Ages 25–34 y, Rate of Use			Age 35+ y, Rate of Use		
	With Disability, %	Without Disability, %	Adjusted OR (95% CI)	With Disability, %	Without Disability, %	Adjusted OR (95% CI)	With Disability, %	Without Disability, %	Adjusted OR (95% CI)
Alcohol	81.7	90.2	0.48 (0.17, 1.39)	89.0	92.4	0.64 (0.33, 1.24)	86.2	87.4	0.86 (0.48, 4.96)
Cocaine	26.0	17.8	1.65 (0.38, 7.17)	21.0	25.8	0.73 (0.37, 1.44)	10.7	6.7	1.49 (0.85, 2.63)
Crack	19.9	3.7	6.36 (1.05, 38.6)*	5.8	3.7	1.42 (0.64, 3.17)	2.5	1.0	1.93 (0.76, 4.96)
Heroin	5.0	0.7	6.89 (1.35, 35.1)*	3.7	1.8	2.05 (0.70, 6.04)	3.1	1.4	1.86 (0.55, 6.27)
Marijuana	61.4	50.4	1.52 (0.58, 3.78)	45.7	54.3	0.54 (0.33, 0.88)**	25.1	23.6	0.99 (0.70, 1.41)
Sedatives	15.3	4.2	4.10 (0.54, 30.84)	10.6	7.4	1.49 (0.62, 3.60)	8.0	3.4	2.46 (1.21, 4.98)**
Tranquilizers	15.5	7.4	2.29 (0.57, 9.22)	9.5	10.0	0.95 (0.42, 2.17)	8.1	4.1	2.18 (1.08, 4.42)*

Note. OR = odds ratio; CI = confidence interval. Rates of use are based on sample weights from the 1991 National Household Survey on Drug Abuse (NHSDA).

Source. Data were derived from the 1991 NHSDA.¹¹

* $P \leq .05$; ** $P \leq .01$.

TABLE 1—Demographic Characteristics of the Sample, by Disability Status: The 1991 National Household Survey on Drug Abuse

	With Disability, % (n = 577)	Without Disability, % (n = 24 012)
Age		
18–24	3.9	15.9
25–34	10.3	21.5
35+	85.9	62.6
Race/ethnicity		
Black	20.7	10.7
Hispanic	8.0	7.6
White	68.7	78.7
Other	3.0	3.0
Sex		
Female	44.5	52.6
Male	55.5	47.4

Note. Percentages are estimated on the basis of sample weights from the 1991 National Household Survey on Drug Abuse (NHSDA).

Source. Data were derived from the 1991 NHSDA.¹¹

Results

The distribution of age, sex, and race/ethnicity by disability is shown in Table 1. For the youngest age group (aged 18 to 24), respondents with disabilities had higher odds of ever using heroin and cocaine than the nondisabled. Higher odds for those with disabilities were found for the nonprescribed use of sedatives and

tranquilizers among those in the oldest age range (Table 2). Among 25- to 34-year-olds, a small but statistically significant difference in marijuana use was found, with odds for the disabilities group lower than for the nondisabled group. No differences in the odds of alcohol use were found for any age group.

Discussion

This report is the first epidemiological study of the association of drug use with disability in a nonreferred nationwide US sample. It provides new evidence that this association is influenced by class of drug and age of respondents. Younger people with disabilities were more likely to have used crack or heroin than their nondisabled peers, but among older subjects (35 and older), the use of nonmedically prescribed sedatives or tranquilizers was more prevalent among disabled than nondisabled respondents. These preliminary findings indicate that the prevalence of use of certain illicit drugs is higher for disabled than nondisabled persons, suggesting that unidentified and untreated drug problems may exist within the disabled population.

These findings must be considered in light of the limitations of the data. Persons living in institutions were excluded, and working persons with disabilities were not included in the disabilities group. In addition, the disabilities group could have included some individuals who were disabled because of substance abuse. The specific disabilities were not defined, and no data were available regarding the temporal sequence of drug use and onset

of disability. Analysis of lifetime prevalence of use provided no information on the amount of use or drug-related problems. Nevertheless, these results, which are based on a nationwide nonreferred sample, suggest that persons with disabilities might be more likely than persons without disabilities to have experience with illicit drug use, and that the type of used drug could vary with age.

These results are consistent with the findings of Adlaf et al.⁴ that subjects who were severely physically disabled reported higher use of sedatives and tranquilizers than nondisabled or partially disabled subjects. On the other hand, these findings showed no significant differences in alcohol use, although some previous studies have suggested that persons with certain types of disabilities may have high rates of alcohol-related problems.^{4,7–9} This difference could be due to the insensitivity of measuring lifetime prevalence of any use rather than amount of use or alcohol-related problems.

Given the abuse liability of heroin and cocaine, the elevated prevalence of the use of these drugs among disabled youth is a new finding that might be viewed with some alarm. It is possible that persons who are severely disabled at an early age represent a heretofore unidentified group at high risk for serious drug addiction. The elevation of nonmedically prescribed tranquilizer and sedative use among the older disabled group could be due to an increased likelihood of initial exposure to these drugs as a part of medical treatment. The finding that marijuana use in the 25–34 age range was

significantly lower among persons with disabilities was unexpected and difficult to interpret.

These findings indicate that drug use is not inconsequential among persons with disabilities, suggesting that drug treatment should be considered when the needs of individuals with disabilities are assessed and that treatment programs should be accessible to these individuals. Further research is needed to specifically address drug abuse and dependence among persons with disabilities, including epidemiological research that uses a clearer definition of disability and an oversampling procedure in order to capture a broader segment of the disability community. A useful initial step would be the inclusion of improved disability measures in ongoing studies of drug use in the general population, such as the National Household Survey on Drug Abuse. □

Acknowledgments

This article was prepared with support from the Addiction Research Center, National Insti-

tute on Drug Abuse. The opinions expressed here are solely those of the authors, and no official endorsement of the National Institutes of Health should be inferred.

A more limited analysis of this dataset was presented at the 1993 National Institute on Drug Abuse, Second National Conference on Drug Abuse Research and Practice, Washington, DC.

References

1. *The ICD Survey of Disabled Americans: Bringing Disabled Americans into the Mainstream: A Nationwide Survey of 1000 Disabled People*. New York, NY: Louis Harris and Associates Inc; 1986. Study 854009.
2. *Report on Surveys Conducted by the Bay Area Project on Disabilities and Chemical Dependency*. Belmont, Calif.: Bay Area Project on Disabilities and Chemical Dependency; 1988.
3. Cherry L. Institute on alcohol, drugs, and disability: from grassroots activity to systems changes. In: Heinemann AW, ed. *Substance Abuse and Physical Disability*. New York, NY: The Haworth Press; 1993:181-215.
4. Adlaf EM, Smart RG, Walsh GW. Substance use and work disabilities among a general population. *Am J Drug Alcohol Abuse*. 1992;18:371-387.
5. Helwig AA, Holicky R. Substance abuse in persons with disabilities: treatment considerations. *J Counseling Dev*. 1994;72:227-233.
6. Ogborne AC, Smart RG. People with physical disabilities admitted to a residential addiction treatment program. *Am J Drug Alcohol Abuse*. 1995;21:137-145.
7. Heinemann AW, Doll M, Schnoll S. Treatment of alcohol abuse in persons with recent spinal cord injuries. *Alcohol Health Res World*. 1989;13:110-117.
8. Jones GA. Alcohol abuse and traumatic brain injury. *Alcohol Health Res World*. 1989;13:104-109.
9. Sparadeo FR, Strauss D, Barth JT. The incidence, impact, and treatment of substance abuse in head trauma rehabilitation. *J Head Trauma Rehabil*. 1990;5:1-8.
10. Hillbom M, Holm L. Contribution of traumatic head injury to neuropsychological deficits in alcoholics. *J Neurol Neurosurg Psychiatry*. 1986;49:1348-1353.
11. *National Household Survey on Drug Abuse: Main Findings 1991*. Rockville, MD.: Substance and Mental Health Services Administration; 1991. SAMHSA publication 93-1980.
12. *SUDAAN (Software for Survey Data Analysis) Version 6.00 Manual*. Research Triangle Park, NC: Research Triangle Institute; 1992.

Visit APHA on the World Wide Web!

The APHA Home Page on the World Wide Web offers the latest information on APHA membership, the newest book titles and publication ordering information, other Association news, and updates on the most important public health issues. The site changes regularly, so visit often!

The Internet address is:

<http://www.apha.org/>